

Title (en)

THERAPEUTIC AGENT FOR CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD), CYSTIC FIBROSIS OR PULMONARY HYPERTENSION

Title (de)

THERAPEUTISCHER WIRKSTOFF FÜR CHRONISCH OBSTRUKTIVE LUNGENERKRANKUNG (COPD), MUKOVISZIDOSE ODER PULMONALE HYPERTONIE

Title (fr)

AGENT THERAPEUTIQUE POUR TRAITER LES MALADIES PULMONAIRES OBSTRUCTIVES CHRONIQUES, LA FIBROSE CYSTIQUE OU L'HYPERTENSION PULMONAIRE

Publication

**EP 1837035 A4 20090805 (EN)**

Application

**EP 06700849 A 20060112**

Priority

- JP 2006300665 W 20060112
- JP 2005006893 A 20050113

Abstract (en)

[origin: EP1837035A1] The present invention provides a prophylactic, therapeutic or ameliorative medicament for chronic obstructive pulmonary disease (COPD), cystic fibrosis or pulmonary hypertension. More specifically, the present invention provides: (1) a prophylactic, therapeutic or ameliorative medicament for chronic obstructive pulmonary disorder (COPD), cystic fibrosis or pulmonary hypertension, having an NF- $\kappa$ B decoy as the active ingredient thereof; (2) the NF- $\kappa$ B decoy is an oligonucleotide containing the binding sequence GGGRHTYYC (where R represents either A or G; Y represents either C or T; and H represents either A, C or T); (3) an oligonucleotide wherein the NF- $\kappa$ B binding sequence is GGGATTCCC or GGGACTTCC; (4) an oligonucleotide wherein the NF- $\kappa$ B decoy is represented by SEQ ID NO:3; (5) the NF- $\kappa$ B decoy is a double-stranded oligonucleotide; (6) the NF- $\kappa$ B decoy is administered in the form of a fine powder; and (7) the NF- $\kappa$ B decoy fine powder is a dry powder.

IPC 8 full level

**A61K 45/00** (2006.01); **A61K 9/14** (2006.01); **A61K 9/72** (2006.01); **A61K 31/7088** (2006.01); **A61K 31/713** (2006.01); **A61K 48/00** (2006.01); **A61P 11/00** (2006.01); **C12N 15/09** (2006.01)

CPC (source: EP US)

**A61K 9/0073** (2013.01 - EP US); **A61K 9/0075** (2013.01 - EP US); **A61K 9/0078** (2013.01 - EP US); **A61K 9/008** (2013.01 - EP US); **A61K 31/7088** (2013.01 - EP US); **A61K 31/713** (2013.01 - EP US); **A61P 11/00** (2017.12 - EP); **C12N 15/113** (2013.01 - EP US); **C12N 2310/13** (2013.01 - EP US)

Citation (search report)

- [E] EP 1642591 A1 20060405 - ANGES MG INC [JP]
- [Y] WO 03105780 A2 20031224 - EPIGENESIS PHARMACEUTICALS INC [US], et al
- [Y] EP 0824918 A1 19980225 - FUJISAWA PHARMACEUTICAL CO [JP]
- [XY] GRIESENBACH U ET AL: "ANTI-INFLAMMATORY GENE THERAPY DIRECTED AT THE AIRWAY EPITHELIUM", GENE THERAPY, MACMILLAN PRESS LTD., BASINGSTOKE, GB, vol. 7, no. 4, 1 February 2000 (2000-02-01), pages 306 - 313, XP001041670, ISSN: 0969-7128
- [XY] DONNELLY L E ET AL: "THERAPY FOR CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN THE 21ST CENTURY", DRUGS, ADIS INTERNATIONAL LTD, vol. 63, no. 19, 1 January 2003 (2003-01-01), pages 1973 - 1998, XP008039100, ISSN: 0012-6667
- [XY] MATERA M G ET AL: "New anti-inflammatory approaches in COPD", DRUG DISCOVERY TODAY: THERAPEUTIC STRATEGIES, ELSEVIER, vol. 1, no. 3, 1 December 2004 (2004-12-01), pages 335 - 343, XP004731231, ISSN: 1740-6773
- [YA] GRIESENBACH U ET AL: "Cytoplasmic deposition of NF $\kappa$ B decoy oligonucleotides is insufficient to inhibit bleomycin-induced pulmonary inflammation.", GENE THERAPY AUG 2002, vol. 9, no. 16, August 2002 (2002-08-01), pages 1109 - 1115, XP002531348, ISSN: 0969-7128
- [Y] WRIGHT J G ET AL: "The Role of Nuclear Factor Kappa B in the Pathogenesis of Pulmonary Diseases: Implications for Therapy", AMERICAN JOURNAL OF RESPIRATORY MEDICINE, ADIS INTERNATIONAL, AUCKLAND, NZ, vol. 2, no. 3, 1 January 2003 (2003-01-01), pages 211 - 219, XP003000406, ISSN: 1175-6365
- [Y] GILL J S ET AL: "Effects of NF $\kappa$ B decoy oligonucleotides released from biodegradable polymer microparticles on a glioblastoma cell line", BIOMATERIALS, ELSEVIER SCIENCE PUBLISHERS BV., BARKING, GB, vol. 23, no. 13, 1 July 2002 (2002-07-01), pages 2773 - 2781, XP004352587, ISSN: 0142-9612
- [A] GAMBARI R: "NEW TRENDS FOR THE DEVELOPMENT OF NOVEL DECOY MOLECULES AGAINST NUCLEAR FACTOR KAPPA-B (NF-KB) TRANSCRIPTION FACTOR", MINERVA BIOTECNOLOGICA, EDIZIONI MINERVA MEDICA, TORINO, IT, vol. 16, no. 2, 1 January 2004 (2004-01-01), pages 145 - 149, XP008041912, ISSN: 1120-4826
- See references of WO 2006075776A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**EP 1837035 A1 20070926; EP 1837035 A4 20090805;** CA 2594675 A1 20060720; JP WO2006075776 A1 20080612;  
US 2009215868 A1 20090827; WO 2006075776 A1 20060720

DOCDB simple family (application)

**EP 06700849 A 20060112;** CA 2594675 A 20060112; JP 2006300665 W 20060112; JP 2006553032 A 20060112; US 79416706 A 20060112